

**WHAT IS CLAIMED IS:**

1. A method of lowering calcium and phosphorous in shellfish waste meal comprising the steps of:

- a) introducing a shellfish waste meal into a process flow;
- b) separating said shellfish waste meal and collecting said shellfish waste meal

that are equal to or less than 3/16 of an inch in diameter:

- c) mixing said separated shellfish waste meal with an acid;
- d) adding a liquid to said separated shellfish waste meal to create a slurry;
- e) determining the ph of said slurry;
- f) stirring said slurry;
- g) settling said slurry;
- h) draining said slurry creating a treated shellfish meal
- i) rinsing said treated shellfish meal;
- j) determining the ph of the treated shellfish meal;
- k) draining the treated shellfish meal; and
- l) drying the treated shellfish meal.

2. The method as recited in claim 1 whereby said acid is hydrochloric acid.

3. The method as recited in claim 2 whereby said step of adding a liquid further comprises using H<sub>2</sub>O.

4. The method as recited in claim 3 whereby said step of determining the ph further comprises adding water until said ph is less than or equal to 2.

5. The method as recited in claim 4 whereby said step of settling said slurry is within the range 4-8 hours until the top of the shell fish meal level is clearly visible.

6. The method as recited in claim 5 whereby said step of draining said slurry further comprises the step of filtering said slurry using a screen having openings less than .185 inch in diameter.

7. The method as recited in claim 6 whereby said step of rinsing said treated shellfish waste meal further comprises using H<sub>2</sub>O.

8. The method as recited in claim 7 whereby said step j) determining the ph of the treated shellfish waste meal further comprises adding water until said ph is greater than or equal to 4.

9. The method as recited in claim 8 whereby said step of separating said shellfish waste meal further comprises the step of trapping pieces greater than 3/16 of an inch in diameter and grinding them and reintroducing them into step a).

10. A method of lowering calcium and phosphorous and increasing the crude protein levels in crawfish waste meal comprising the steps of:

a) introducing a crawfish waste meal into a process flow;

b) separating said crawfish waste meal and collecting said shellfish waste meal that are equal to or less than 3/16 of an inch in diameter:

c) mixing said separated crawfish waste meal with an acid;

d) adding a liquid to said separated shellfish waste meal to create a slurry;

e) determining the ph of said slurry;

f) stirring said slurry;

g) settling said slurry;

h) draining said slurry creating a treated crawfish meal;

i) rinsing said treated crawfish meal;

j) determining the ph of the treated crawfish meal;

k) draining the treated crawfish meal; and

l) drying the treated crawfish meal.

11. The method as recited in claim 10 whereby said acid is hydrochloric acid.

12. The method as recited in claim 11 whereby said step of adding a liquid further comprises using H<sub>2</sub>O.

13. The method as recited in claim 12 whereby said step of determining the ph further comprises adding water until said ph is less than or equal to 2.

15. The method as recited in claim 13 whereby said step of settling said slurry is within the range 4-8 hours until the top of the crawfish meal level is clearly visible.

15. The method as recited in claim 14 whereby said step of draining said slurry further comprises the step of filtering said slurry using a screen having openings less than .142 inch in diameter.

16. The method as recited in claim 15 whereby said step of rinsing said treated crawfish waste meal further comprises using H<sub>2</sub>O.

17. The method as recited in claim 16 whereby said step j) determining the ph of the treated crawfish waste meal further comprises adding water until said ph is greater than or equal to 4.

18. The method as recited in claim 17 whereby said step of separating said crawfish waste meal further comprises the step of trapping pieces greater than 3/16 of an inch in diameter and grinding them and reintroducing them into step a).

19. The method as recited in claim 18 whereby said step of separating said crawfish waste meal comprises loading said crawfish waste meal into a feed separator comprising a body having a top and a bottom, a steel cylinder is centrally positioned inside said body, a motor attached to said steel cylinder, said body further including a catch pan attached to the bottom of said body, a mesh screen having 3/16 of an inch openings is positioned within said steel cylinder so that said crawfish waste meal 3/16 of an inch in diameter or less will fall through the mesh screen to said catch pan.

20. A method of lowering calcium and phosphorous in shellfish waste meal comprising the steps of:

a) introducing a shellfish waste meal into a process flow;

b) separating said shellfish waste meal and collecting said shellfish waste meal that are equal to or less than 3/16 of an inch in diameter:

c) mixing said separated shellfish waste meal with a hydrochloric acid;

d) adding H<sub>2</sub>O to said separated shellfish waste meal to create a slurry;

e) determining if the ph of said slurry is equal to or less than 2;

f) stirring said slurry;

g) settling said slurry between the range of 4-8 hours until the top of the crawfish meal level is clearly visible;

h) draining said slurry creating a treated shellfish meal and further comprises filtering said slurry using a screen having openings less than .85 inch in diameter;

i) rinsing said treated shellfish meal;

j) determining the ph of the treated shellfish meal and adding H<sub>2</sub>O until said ph is greater than or equal to 4;

k) draining the treated shellfish meal; and

l) drying the treated shellfish meal.

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